

REMARKS/ARGUMENTS

Upon entry of the instant amendment, claims 1-5 and 7-13 are pending. In response to the restriction requirement, claim group I is selected for prosecution. Accordingly, claim group II, consisting of claims 14-22 is being cancelled without prejudice. It is respectfully submitted that the claims 1-5 and 7-13, as amended, define patentable subject matter over the references of record.

Claim Rejection – 35 U.S.C. § 112

Claims 1-13 have been rejected under 35 U.S.C. § 112, second paragraph, for being incomplete for emitting essential structural cooperative relationship of elements. Claim 6 has been cancelled. Thus, the rejection with respect to claim 6 is obviated. With respect to claims 1-5 and 7-13, it is respectfully submitted that these claims now recite a first light-emitting semiconductor device with a passivation layer formed on top of the semiconductor device formed with a window to enable a light-monitoring device formed on top of the passivation layer to monitor leakage light from the semiconductor light-emitting device. Accordingly, it is respectfully submitted that the claims, as amended, should obviate the rejection under 35 U.S.C. § 112, second paragraph.

Claims Rejections – 35 U.S.C. § 102

Claims 1, 2, and 6-13 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Aronson et al., U.S. Patent No. 6,483,862. In order for there to be anticipation, each and every one of the elements of the claims must be found in a single reference. It is respectfully submitted that claims 1 and 2 and 7-13 recite subject matter not disclosed or suggested by the Aronson et al. reference. In particular, the claims now recite a passivation layer formed on top of the first light-emitting semiconductor device. The claims further recite a window formed in the passivation layer with the light-monitoring device formed on top of the passivation layer, which enables light escaping through the window to be monitored. The Aronson et al. patent discloses no such structure. Accordingly, there can be no anticipation.

Moreover, it is respectfully submitted that the Aronson et al. patent respectfully teaches away from the invention recited in the claims at issue. In particular, the transition between the semiconductor device and the light-monitoring device in the claims at issue is a simple passivation layer with a window that enables light escaping from the light-emitting semiconductor device to be monitored. The device taught by the Aronson et al. patent on the other hand, is relatively complicated and requires an oxide layer having a specific index of refraction in the range of 2.9 and 3.5 (Aronson et al. patent, column 7, lines 58 et seq.) Without the specific range for the index of refraction, the light monitoring device formed on top of the semiconductor will not work properly. As such, the structure of the integrated device disclosed in the Aronson et al. patent is relatively complicated and expensive to manufacture.

The invention recited in the claims at issue does not require tight process controls to arrive at a specific index of refraction. Rather, the invention recited in the claims at issue recites a light-monitoring device formed on top of the window formed on a passivation layer, which obviates the need for controlling the index of refraction as in the structure disclosed in the Aronson et al. patent. For all of the above reasons, the Examiner is respectfully requested to provide favorable consideration of claims 1, 2 and 7-13.

Claim Rejection – 35 U.S.C. § 103

Claims 3-5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Aronson et al. patent in view of Jewel, U.S. Patent No. 5,877,519.


Claims 3-5 relate to a device with different substrates formed of GaAs, InP and GaN. These claims recite, in combination, a semiconductor device that includes a first light-emitting semiconductor device with a passivation layer formed thereupon. A window is formed in the passivation layer. A light-monitoring device is formed on top of the passivation layer to allow light escaping through the window to be monitored. Unlike the structure taught by the Aronson et al. patent, the invention recited in claims 3-5 does not require tight process controls to control the index of refraction of the layer between the light-monitoring device and the light-emitting

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device. For these reasons and all of the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of these claims.

Respectfully submitted,

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